#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

(707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.21

## WELDING WITNESS REPORT

Resident Engineer: Pursell, Gary **Report No:** WWR-000317 Address: 333 Burma Road **Date Inspected:** 12-Jul-2007

City: Oakland, CA 94607

**OSM Arrival Time:** 800 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 Prime Contractor: American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

Witness:		dure Qualification Rec	ord	Welder Qual		Fracture Critical	
	Weldi	ng NDT		Mechnical To	esting, describe:		
<b>Index Lot #:</b> B71-041-07a				Witness Lot	#: B71-041-07		
<b>Bridge No:</b> 34-0006			<b>Component:</b>	Bid 52			
Welder:	Zhu Hai	Ping		ID #:	N/A		
Joint Description:		Figure 2.3 fillet welds		N/A	WPS ID #:	PWPS-B-T-3113	N/A
Base Metal:		A709-HPS 485W T2/Z		N/A	PQR ID #:	HP2007151	N/A
Thickness:		90 mm		N/A	<b>Process:</b>	SMAW	N/A
Electrode Spec/Class: AWS 5.1/E7018-1			N/A	<b>Positions:</b>	3-F (single and multiple passes)	N/A	
<b>Backing Ma</b>	terial:	N/A		N/A	CWI:	Xu Bing	N/A
Average Am	ps:	168		N/A	AWS Code:	AWS 1.5 2002	N/A
Average Vol	lts:	22.3		N/A	<b>Applicable Sec:</b>	AWS 5.10.3	N/A
Travel Spee	d:	78.9 mm/min		N/A	Heat Input:	2.85 KJ/mm	N/A
Preheat:		164 Celsius		N/A			

#### **Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector witnessed welding of the Procedure Qualification (PQR) test plate using single and multiple passes (2) with shielded metal arc welding (SMAW), THJ506Fe-1, 4.0 mm diameter electrode in the vertical(3F) position The welding was performed per the AWS D1.5-02, Fillet Weld WPS Qualification Section 5.10 requirements. The welding appeared to comply with contract documents.

The QA inspector did not observe any significant air movement by the testing area during welding.

## **Summary of Conversations:**

The QA inspector did not have any significant conversations on this date

is in general conformance with the contract requirements.

**Observed welding, testing or results:** is not in conformance with the contract requirements.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

# WELDING WITNESS REPORT

(Continued Page 2 of 2)

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	McClary,David	QA Reviewer